Title (en)

CIRCUIT FOR CONTROLLING THE HOLDING FORRE OF A BLANK HOLDER IN A DEEP DRAWING PRESS

Publication

EP 0330718 B1 19920805 (DE)

Application

EP 88103297 A 19880303

Priority

EP 88103297 A 19880303

Abstract (en)

[origin: EP0330718A1] A circuit is described for controlling the holding force of a hydraulic blank holder in a deep drawing press in which a blank to be drawn is clamped between a movable top part and a movable bottom part of the blank holder and is moved by the latter against a drawing punch, and the bottom part of the blank holder is supported by at least one hydraulic displacement cylinder in whose outlet line a control valve activated by the circuit is arranged. The circuit has a pressure transducer which receives the actual hydraulic pressure prevailing in the displacement cylinder and transmits a corresponding actual electric signal, and a controller to which a signal derived from the difference between a desired electric signal corresponding to a desired pressure and the actual signal is fed and which transmits a signal influencing the control valve. The circuit comprises a limiter to which the differential signal is fed and whose output is connected to the input of the integrator of the controller, and furthermore a differentiator to which the actual signal is fed and whose output signal is fed to the integrator, and also a comparator which activates a circuit device and renders the differentiator effective only when the said differential signal drops below a predetermined threshold value. <IMAGE>

IPC 1-7

B21D 24/08; G05B 11/42; G05D 15/01

IPC 8 full level

B21D 24/08 (2006.01); **G05B 11/42** (2006.01); **G05D 15/01** (2006.01)

CPC (source: EP)

B21D 24/08 (2013.01); **G05B 11/42** (2013.01); **G05D 15/01** (2013.01)

Cited by

EP0773076A1; DE102015016773A1

Designated contracting state (EPC)

DE FR GB SE

DOCDB simple family (publication)

EP 0330718 A1 19890906; **EP 0330718 B1 19920805**; DE 3873514 D1 19920910

DOCDB simple family (application)

EP 88103297 A 19880303; DE 3873514 T 19880303